UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/661,811	NATHAN ET AL.
	Examiner	**Art Unit**	
	Joshua Murdough	3621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 August 2007*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-42* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 September 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date *8/30/2007*.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement filed 30 August 2007 fails to comply with 37 CFR

1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently

understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the

content of the information, of each patent listed that is not in the English language. It has been

placed in the application file, but the information referred to therein has not been considered.

The referenced pieces of prior art that are not in English are JP 62-284496 and

JP 58-179892.

It is noted that there are well over 200 references cited within this IDS. The Examiner

has performed a cursory review of all the ones containing subject matter in English. If there are

any references Applicants feel have particular relevance to the instant application, they should

make note of the references and the relevance.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference

characters "Fig. 7" and "Figure 2" have both been used to designate the seventh page of the

drawings. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to

the Office action to avoid abandonment of the application. Any amended replacement drawing

sheet should include all of the figures appearing on the immediate prior version of the sheet,

even if only one figure is being amended. Each drawing sheet submitted after the filing date of

an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet"

pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will

be notified and informed of any required corrective action in the next Office action. The

objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because

reference characters "Fig. 8" and "Figure 1" have both been used to designate the eighth page of

the drawings. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in

reply to the Office action to avoid abandonment of the application. Any amended replacement

drawing sheet should include all of the figures appearing on the immediate prior version of the

sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing

date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the

applicant will be notified and informed of any required corrective action in the next Office

action. The objection to the drawings will not be held in abeyance.

The drawings are objected to because many of them are of generally poor quality

especially the ones that appear to be screen captures. Corrected drawing sheets in compliance

with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the

application. Any amended replacement drawing sheet should include all of the figures appearing

on the immediate prior version of the sheet, even if only one figure is being amended. The figure

or figure number of an amended drawing should not be labeled as "amended." If a drawing

figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and

where necessary, the remaining figures must be renumbered and appropriate changes made to the

brief description of the several views of the drawings for consistency. Additional replacement

sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet

submitted after the filing date of an application must be labeled in the top margin as either

"Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not

accepted by the examiner, the applicant will be notified and informed of any required corrective

action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
> subject matter which the applicant regards as his invention.

Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for

failing to particularly point out and distinctly claim the subject matter which applicant regards as

the invention.

The use of the term "and/or" makes it unclear if one of the options or both are required in

the system. The examiner has interpreted this limitation to read "or" when evaluating the claim

on its merits.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

Claims 1-9, 11-17, 19-26, 27-29, 31, 35, 37, 39 and 41 are rejected under 35 U.S.C.

103(a) as being unpatentable over Bowman-Amuah (6,289,382) in view of admitted prior art

Martin (WO 93/18465).

As to claim 1, Bowman-Amuah shows:

A jukebox system comprising:

a central server including a master library of content to be accessed (transaction

database; Column 49, lines 49-65);

a plurality of local servers each being operably coupled to respective ones of said

plurality of devices (replica database; Column 49, lines 49-65), and

being in substantially close proximity to said respective ones of said plurality of

devices (benefits described are those of having a server in substantially close

proximity; Column 49, lines 60-65),

said local servers containing content that is not resident on said devices (To allow

collaboration, the document cannot be on a device "without constant network

attachment." Therefore, it must reside on the local server.; Column 50, lines 1-5).

Bowman-Amuah does not expressly show:

a plurality of jukebox devices in communication with said central server, said

jukebox devices providing access to said central server; and

Martin shows a system in which a series of computer jukeboxes (Figure 1, 13) are

connected to a central server (Figure 1, 11) in order to acquire new musical recording data

(Abstract). It would have been obvious to one of ordinary skill in the art at the time of the

invention to have modified the teachings of Bowman-Amuah to include the jukebox system of

Martin, in order to create a jukebox system with better availability, better performance, and

reduced network costs (Bowman-Amuah; Column 49, lines 60-65).

As to claim 2, Bowman-Amuah further shows:

said local servers are periodically updated independently from said jukebox devices

(Scheduled; Column 49, lines 59-60).

As to claim 3, Bowman-Amuah further shows:

said local servers are updated from the central server via the jukebox device (User

initiated; Column 49, lines 59-60).

As to claim 4, Bowman-Amuah further shows:

content available at the local server substantially mirrors content available at the

central server at a given point in time (Complete replication in real-time; Column

49, lines 55-60).

As to claim 5, Bowman-Amuah further shows:

said local server is in communication with a plurality of remote devices (Users of

mobile devices; Column 50, lines 1-3),

said local server operating to selectively deliver content to said remote devices under

control of the central server (Column 52, lines 17-39).

As to claim 6, Bowman-Amuah further shows:

a plurality of non-jukebox devices operably connected to said local server (Users of

mobile devices; Column 50, lines 1-3),

said local server operating as a local central hub for managing said plurality of non-

jukebox devices (Column 52, lines 40-53).

As to claim 7, Bowman-Amuah further shows:

at least one non-jukebox device being operably connected to at least one local server

(Users of mobile devices; Column 50, lines 1-3),

said local server operating to manage said non-jukebox device (Column 52, lines 40-

53).

As to claim 8, Bowman-Amuah further shows:

the non-jukebox devices provide services in exchange for payment by a user (Usage

is metered and charged according to preset rates; Column 305, lines 1-53).

As to claim 9, Bowman-Amuah further shows:

the non-jukebox device provides services in exchange for payment by a user (Usage

is metered and charged according to preset rates; Column 305, lines 1-53).

As to claim 11, Bowman-Amuah further shows

said local server provides management services for equipment that is capable of

downloading updated information (the mobile devices are managed, in part, by

the local server and are capable of downloading updated information; Column 50,

lines 1-5 and Column 52, lines 40-53).

As to claim 12, Bowman-Amuah further shows:

the local server is connected to its respective jukebox device via a dedicated high-

speed communications connection. (Twisted pair, for example; Column 91, lines

18-31)

As to claim 13, Bowman-Amuah further shows:

the dedicated high-speed communications connection is an Ethernet network.

(Ethernet is 10 Base-T, with the T meaning twisted pair as sited for claim 12)

As to claim 14, Bowman-Amuah further shows:

the dedicated high-speed communications connection operates at speeds at least as

fast as an Ethernet network. (Ethernet is at least as fast as Ethernet, Fiber optic

cable is faster; Column 91, lines 23 and 25)

As to claim 15, Bowman-Amuah further shows:

said local server is updated via an update tool. (A tool is understood to be a program;

Column 49, lines 59-60)

As to claim 16, Bowman-Amuah further shows:

content resident on said central server and said jukebox devices are compressed

(Column 61, line 60) and encrypted (Column 90, lines 25-37) according to a first

encryption level.

As to claim 17, Bowman-Amuah further shows

content resident on said local servers is encrypted with a second layer of encryption.

(The encryption is based on the transfer. In the current system, there is the central

server, the local server, and the device. Therefore, the data is encrypted twice

during the process. As currently described, the first is for the transfer between the

central server and the device, where the second is between the device and the

local server.)

As to claim 19, Bowman-Amuah shows:

A jukebox system comprising:

a central server (transaction database; Column 49, lines 49-65);

a local server in communication with at least one of said plurality of devices, said

local server being arranged to provide content to said device (replica database;

Column 49, lines 49-65).

Bowman-Amuah does not expressly show:

a plurality of jukebox devices in communication with said central server for receiving

content and updates from said central server;

Martin shows a system in which a series of computer jukeboxes (Figure 1, 13) are

connected to a central server (Figure 1, 11) in order to acquire new musical recording data

(Abstract). It would have been obvious to one of ordinary skill in the art at the time of the

invention to have modified the teachings of Bowman-Amuah to include the jukebox system of

Martin, in order to create a jukebox system with better availability, better performance, and

reduced network costs (Bowman-Amuah; Column 49, lines 60-65).

As to claim 20, Bowman-Amuah further shows:

said local server is located in substantially close proximity to said jukebox device

(benefits described are those of having a server in substantially close proximity;

Column 49, lines 60-65) and

is connected to said jukebox device via a high-speed communication link (Twisted

pair, for example; Column 91, lines 18-31)

As to claim 21, Martin, in the above referenced combination, shows:

said content provided by said local server to said jukebox device is based on

selections made by a user operating the jukebox device (Selection keys, Figure 1,

123; Page 9, lines 34-35) .

As to claim 22, Bowman-Amuah further shows:

the local server is periodically updated. (Scheduled; Column 49, lines 59-60)

As to claim 23, Bowman-Amuah further shows:

the content of the local server substantially mirrors the content of the central server at

a given point in time. (Complete replication in real-time; Column 49, lines 55-60)

As to claim 24, Bowman-Amuah further shows:

content resident on said central server and said jukebox devices are compressed

(Column 61, line 60) and encrypted (Column 90, lines 25-37) according to a first

encryption level.

As to claim 25, Bowman-Amuah further shows:

content resident on said local servers is encrypted with a second layer of encryption.

(The encryption is based on the transfer. In the current system, there is the central

server, the local server, and the device. Therefore, the data is encrypted twice

during the process. As currently described, the first is for the transfer between the

central server and the device, where the second is between the device and the

local server.; Column 90, lines 25-37)

As to claim 27, Bowman-Amuah shows:

A method of operating a jukebox system comprising:

providing a plurality of services and content at a central repository (transaction

database; Column 49, lines 49-65);

connecting a local server to at least one of said plurality of devices (replica database;

Column 49, lines 49-65),

said local server being in substantially close proximity to said jukebox device to

which it is connected (benefits described are those of having a server in

substantially close proximity; Column 49, lines 60-65);

providing access to content stored on the local server to a user via the device (To

allow collaboration, the document cannot be on a device "without constant

network attachment." Therefore, it must reside on the local server.; Column 50,

lines 1-5);

downloading a user selection from the local server to the device automatically or

based on user action (Column 50, lines 1-5);

Bowman-Amuah does not expressly show:

connecting a plurality of jukebox devices to said content repository via a

communications medium; and

playing or displaying content via the device.

Martin shows a system in which a series of computer jukeboxes (Figure 1, 13), which can

play and display content (Figure 1, 127, 129, 131, and 125) are connected to a central server

(Figure 1, 11) in order to acquire new musical recording data (Abstract). It would have been

obvious to one of ordinary skill in the art at the time of the invention to have modified the

teachings of Bowman-Amuah to include the jukebox system of Martin, in order to create a

jukebox system with better availability, better performance, and reduced network costs

(Bowman-Amuah; Column 49, lines 60-65).

As to claim 28, Bowman-Amuah further shows:

connecting a plurality of remote devices to the at least one local server (Users of

mobile devices; Column 50, lines 1-3),

said local server operating to selectively deliver content to said remote jukebox

devices under control of the central repository (Column 52, lines 17-39).

As to claim 29, Bowman-Amuah further shows:

connecting a plurality of non-jukebox devices to said local server (Users of mobile

devices; Column 50, lines 1-3),

said local server arranged to operate as a central hub for managing said plurality of

non-jukebox devices (Column 52, lines 40-53).

As to claim 31, Bowman-Amuah further shows:

compressing content residing on said central server, said jukebox devices and said

local servers (Column 90, lines 25-37);

encrypting content residing on said central server and said jukebox devices at a first

level of encryption; and encrypting content residing on said local servers at a

second level of encryption. (The encryption is based on the transfer. In the

current system, there is the central server, the local server, and the devices.

Therefore, the data is encrypted twice during the process. As currently described,

the second is for the transfer between the local server and the device, where the

first is between the central server and the device.; Column 90, lines 25-37)

As to claim 35, Bowman-Amuah shows:

A jukebox system comprising:

a central server containing a plurality of compressed content files (transaction

database; Column 49, lines 49-65),

said compressed content files being encrypted at a first encryption level (Column 90,

lines 25-37);

containing a plurality of compressed content files encrypted at said first encryption

level (Column 90, lines 25-37); and

a local server in communication with at least one of said plurality of jukebox devices,

said local server being arranged to provide content to said jukebox device (replica

database; Column 49, lines 49-65),

wherein content residing on said local server is encrypted at a second level of

encryption (Column 90, lines 25-37).

(The encryption is based on the transfer. In the current system, there is the central

server, the local server, and the device. Therefore, the data is encrypted twice

during the process. As currently described, the first is for the transfer between the

central server and the device, where the second is between the device and the

local server.)

Bowman-Amuah does not expressly show:

a plurality of jukebox devices in communication with said central server for receiving

content and updates from said central server

Martin shows a system in which a series of computer jukeboxes (Figure 1, 13), which can

play and display content (Figure 1, 127, 129, 131, and 125) are connected to a central server

(Figure 1, 11) in order to acquire new musical recording data (Abstract). It would have been

obvious to one of ordinary skill in the art at the time of the invention to have modified the

teachings of Bowman-Amuah to include the jukebox system of Martin, in order to create a

jukebox system with better availability, better performance, and reduced network costs

(Bowman-Amuah; Column 49, lines 60-65).

As to claim 37, Bowman-Amuah further shows:

decryption keys unique to each local server are communicated to a dedicated

registered jukebox device. (Column 79, lines 22-48)

As to claim 39, Bowman-Amuah shows:

A method of operating a jukebox system comprising:

providing a plurality of services and content at a central repository (transaction

database; Column 49, lines 49-65),

said central repository including compressed content files that are encrypted at a first

level of encryption (Column 90, lines 25-37);

said devices containing compressed content files that are encrypted at said first level

of encryption (Column 90, lines 25-37);

connecting a local server to at least one of said plurality of jukebox devices (replica

database; Column 49, lines 49-65),

said local server being in substantially close proximity to said jukebox device to

which it is connected (benefits described are those of having a server in

substantially close proximity; Column 49, lines 60-65),

wherein content resident on said local server is encrypted with a second level of

encryption (The encryption is based on the transfer. In the current system, there is

the central server, the local server, and the device. Therefore, the data is

encrypted twice during the process. As currently described, the first is for the

transfer between the central server and the device, where the second is between

the device and the local server.; Column 90, lines 25-37);

providing access to content stored on the local server to a user via the jukebox device

(To allow collaboration, the document cannot be on a device "without constant

network attachment." Therefore, it must reside on the local server.; Column 50,

lines 1-5);

downloading a user selection from the local server to the juk(Column 90, lines 25-37)

ebox device based on user action (Column 50, lines 1-5);

decrypting said user selection at said jukebox device (Column 90, lines 25-37);

Bowman-Amuah does not expressly show:

connecting a plurality of jukebox devices to said content repository via a

communications medium, and

playing or displaying user selected content via the jukebox device.

Martin shows a system in which a series of computer jukeboxes (Figure 1, 13), which can

play and display content (Figure 1, 127, 129, 131, and 125) are connected to a central server

(Figure 1, 11) in order to acquire new musical recording data (Abstract). It would have been

obvious to one of ordinary skill in the art at the time of the invention to have modified the

teachings of Bowman-Amuah to include the jukebox system of Martin, in order to create a

jukebox system with better availability, better performance, and reduced network costs

(Bowman-Amuah; Column 49, lines 60-65).

As to claim 41, Bowman-Amuah further shows:

> decryption keys unique to each local server are communicated to a dedicated
>
> registered jukebox device. (Column 79, lines 22-48)

Claims 10 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Bowman-Amuah in view of admitted prior art Martin.

As to claim 10, Bowman-Amuah in view of Martin as applied to claim 1 shows all of the

elements except:

> a collection of selected local servers are arranged to provide a network of distributed
>
> servers operating under the control of the central server via at least one jukebox
>
> device to provide content and/or services to other devices.

As to claim 30, Bowman-Amuah in view of Martin as applied to claim 27 shows all of

the elements except:

> connecting a collection of local servers to form a network of distributed servers
>
> operating under control of the central repository via at least one jukebox device to
>
> provide content to other devices.

Both of these claims are merely directed toward adding more servers and distributing the

functions. It too would have been obvious to one having ordinary skill in the art at the time the

invention was made to modify Bowman-Amuah to include the claimed server structure. It is the

Examiner's position that absent evidence of new or unexpected results, it is not inventive in

terms of patentability to take one or more servers $(S_1, S_2, S_3, \ldots S_N)$ which perform one or more

tasks $(T_1, T_2, T_3, \ldots T_N)$ and add (or subtract) an additional number of servers (X) to perform all

or part of the same tasks by allocating the tasks between the various servers (*i.e.* S_1 and S_{N+1}

perform T_1; S_2 and S_{N+2} perform T_2; S_3 and S_{N+3} perform T_3; ... while S_N and S_{N+X} perform T_N).

The prior art is replete with examples showing why such scaling (both increasing and decreasing

the number of servers) is desirable.[1]

In other words, a modification increasing the number of servers (*e.g.* having two servers

perform a task previously performed by one server) is analogous to making functions, structures,

or actions separable. It is the Examiner's position that when the difference between the claimed

invention and the prior art is that the prior art does not disclosed an element as separable, as a

matter of law, it would have been obvious to one having ordinary skill in the art to make the

element separable. See MPEP §2144.04 V. *C.* and *In re Dulberg*, 289 F.2d 522, 523, 129 USPQ

348, 349 (CCPA 1961). As noted above, it is desirable to allocate the server tasks to various

servers to help reduce bandwidth bottlenecks and to help increase the benefits from economies of

scale in addition to offering increased security, excellent data management, fast response, and

room for expansion.

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[1] See *e.g.* Watson (U.S. 6,223,209 B1) disclosing distributed satellite world wide web servers
containing identical information placed strategically throughout the Internet so as to be close to
all potential clients to help reduce traffic bottlenecks; Midgely et. al. (U.S. 5,592,611 A)
disclosing additional servers as a stand-in for a failed server so that client service requests are
transparent to the user; Kriegsman (U.S. 6,370,580 B2) disclosing multiple servers as secondary
web severs to optimize file transfers; Burns et. al. (U.S. 6,298,373 B1) disclosing cache servers
which download content during off-peak hours to reduce traffic bottlenecks; Joffe et. al. (U.S.
6,185,619 B1) which discloses decentralized servers; Stiles (U.S. 6,219,692 B1) which discloses
sending essentially identical tasks to multiple servers with differing processing loads to find the
most preferred server provider; Zdepski et. al. (U.S. 5,825,884) disclosing an transactional server
for TV networks; *How Networks Work*, Chapter 17 describing how sever based structures
benefit from economies of scale in addition to offering security, excellent data management, fast
response, and room for expansion; and *How the Internet Works*, Chapter 44 implementing a
server based architecture in Internet e-commerce.

After careful review of the entire record, especially the specification, the Examiner finds

that Applicants have not asserted any new or unexpected results regarding their hardware

configuration (and the software running their hardware configuration) of their server system.

Absent such new or unexpected results, such modifications either increasing or decreasing the

number of servers or computers or even reassigning tasks to different server(s) or computers

would have helped maintain benefits from economies of scale in addition to offering increased

security, excellent data management, fast response, and room for expansion while reducing both

operating and capital costs.

Claims 18, 26, 32-34, 36, and 40 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Bowman-Amuah and Martin as applied to claims 17, 25, 31, 35, and 39 above,

and further in view of Dunning (7,024,485).

As to claim 18, Bowman-Amuah and Martin as applied to claim 17 show everything

except:

> content residing on said local servers are missing a predetermined number of bytes,
>
> said missing bytes being stored in a respective jukebox associated with a
>
> respective local server, said missing bytes being inserted into content received by
>
> a respective jukebox device from a respective local server.

Dunning shows a jukebox (Figure 2, 103) that splits the content file (Figure 3A, 2714)

and only keeps a portion of it (Figure 3A, 2718). When the complete file is requested, the

jukebox receives the other portion of the file (Figure 3C, 2734) and combines it with the part

stored on the jukebox (Figure 3C, 2738). It would have been obvious to one of ordinary skill in

the art at the time of the invention to have further modified the teachings of Bowman-Amuah to

include the divided storage of Dunning for reasons including, preventing a complete copy of the

file from residing on the jukebox where it could be copied (Dunning, Column 6, lines 24-25)

As to claim 26, Bowman-Amuah and Martin as applied to claim 25 show everything

except:

content residing on said local servers are missing a predetermined number of bytes,

said missing bytes being stored in a respective jukebox associated with a

respective local server, said missing bytes being inserted into content received by

a respective jukebox device from a respective local server.

Dunning shows a jukebox (Figure 2, 103) that splits the content file (Figure 3A, 2714)

and only keeps a portion of it (Figure 3A, 2718). When the complete file is requested, the

jukebox receives the other portion of the file (Figure 3C, 2734) and combines it with the part

stored on the jukebox (Figure 3C, 2738). It would have been obvious to one of ordinary skill in

the art at the time of the invention to have further modified the teachings of Bowman-Amuah to

include the divided storage of Dunning for reasons including, preventing a complete copy of the

file from residing on the jukebox where it could be copied (Dunning, Column 6, lines 24-25)

As to claims 32-34, Bowman-Amuah and Martin as applied to claim 31 show everything

except:

content residing on said local servers are missing a predetermined number of bytes,

said missing bytes being stored on respective jukebox devices associated with

respective local servers, the method further comprising: inserting missing bytes

into content received by a respective jukebox from a respective local server; and

said missing bytes are inserted before playing or displaying said content; or

said missing bytes are inserted in the content during play or display.

Dunning shows a jukebox (Figure 2, 103) that splits the content file (Figure 3A, 2714)

and only keeps a portion of it (Figure 3A, 2718). When the complete file is requested, the

jukebox receives the other portion of the file (Figure 3C, 2734) and combines it with the part

stored on the jukebox (Figure 3C, 2738). This recombination can be done prior to or during

playback (Column 6, lines 7-19). It would have been obvious to one of ordinary skill in the art at

the time of the invention to have further modified the teachings of Bowman-Amuah to include

the divided storage of Dunning for reasons including, preventing a complete copy of the file

from residing on the jukebox where it could be copied (Dunning, Column 6, lines 24-25)

As to claim 36, Bowman-Amuah and Martin as applied to claim 35 show everything

except:

> content files residing on said local server are missing a predetermined number of
>
> bytes, said missing bytes being stored in a respective jukebox associated with said
>
> local server, said missing bytes being inserted into a content file received by said
>
> respective jukebox device from a respective local server.

Dunning shows a jukebox (Figure 2, 103) that splits the content file (Figure 3A, 2714)

and only keeps a portion of it (Figure 3A, 2718). When the complete file is requested, the

jukebox receives the other portion of the file (Figure 3C, 2734) and combines it with the part

stored on the jukebox (Figure 3C, 2738). It would have been obvious to one of ordinary skill in

the art at the time of the invention to have further modified the teachings of Bowman-Amuah to

include the divided storage of Dunning for reasons including, preventing a complete copy of the

file from residing on the jukebox where it could be copied (Dunning, Column 6, lines 24-25)

As to claim 40, Bowman-Amuah and Martin as applied to claim 39 show everything

except:

> encrypted content files residing on said local server are missing a predetermined
>
> number of bytes, said missing bytes being stored on a jukebox device associated
>
> with said local server, the method further comprising: inserting missing bytes into
>
> a content file received by the associated jukebox from its local server.

Dunning shows a jukebox (Figure 2, 103) that splits the content file (Figure 3A, 2714)

and only keeps a portion of it (Figure 3A, 2718). When the complete file is requested, the

jukebox receives the other portion of the file (Figure 3C, 2734) and combines it with the part

stored on the jukebox (Figure 3C, 2738). It would have been obvious to one of ordinary skill in

the art at the time of the invention to have further modified the teachings of Bowman-Amuah to

include the divided storage of Dunning for reasons including, preventing a complete copy of the

file from residing on the jukebox where it could be copied (Dunning, Column 6, lines 24-25)

Claims 38 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Bowman-Amuah and Martin as applied to claims 37 and 41 above, and further in view of Raike

(2002/0162104).

Bowman-Amuah and Martin as applied to claims 37 and 41 show all of the elements of

claims 38 and 42 except:

> decryption keys are stored in a volatile memory.

Raike shows a system for encrypted media key management (Title), wherein the keys to

the media servers are stored in volatile memory (Figure 1, 6). (Paragraph 0049) It would have

been obvious to one of ordinary skill in the art at the time of the invention to have further

modified the teaching of Bowman-Amuah to include the storage of keys in volatile memory, as taught by Raike, for reasons including, making it more secure and preventing repeat use (Raike, Paragraph 0049).

Conclusion

In accordance with *In re Lee*, 277 F.3d 1338, 1344-45, 61 USPQ2d 1430, 1434-35 (Fed. Cir. 2002), the Examiner finds that the references How Networks Work, Millennium Ed. by Frank J. Derfler et. al. and How the Internet Works, Millennium Ed. by Preston Gralla are additional evidence of what is basic knowledge or common sense to one of ordinary skill in this art. Each reference is cited in its entirety. Moreover, because these two references are directed towards beginners (see *e.g.* "User Level Beginning . . ."), because of the references' basic content (which is self-evident upon review of the references), and after further review of the entire application and all the art now of record in conjunction with the factors as discussed in MPEP §2141.03 (where practical), the Examiner finds that these two references are primarily directed towards those of low skill in this art. Because these two references are directed towards those of low skill in this art, the Examiner finds that one of ordinary skill in this art must—at the very least—be aware of and understand the knowledge and information contained within these two references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Murdough whose telephone number is (571) 270-3270. The examiner can normally be reached on Monday - Thursday, 7:00 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Andrew Fischer can be reached on (571) 272-6779. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

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